



Mid Atlantic Regional Chapter of the American College of Sports Medicine

Annual Scientific Meeting, November 1st – 2nd, 2019
Conference Proceedings

International Journal of Exercise Science, Volume 9, Issue 8



Effects of Pre-infusion and Home Exercise Program on Quality of Life and Fatigue During Chemotherapy Treatment: A Case Study

Ashley L. Oostveen, Meghan G. Ramick, Selen Razon, Melissa A. Reed. West Chester University of Pennsylvania, West Chester, PA

Given the paucity of research examining the effects of exercise during chemotherapy, research exploring exercise concomitant to infusion treatments is justified. **PURPOSE:** The present study investigated the effects of a pre-infusion and home exercise program (HEP) on Quality of Life (QoL) and cancer-related fatigue. **METHODS:** The intervention spanned eight weeks with a functional assessment and a cancer-specific QoL questionnaire given at start and end of study. A general health-related QoL questionnaire was administered at the time of each supervised exercise session which occurred 72 hours prior to infusion treatments. Exercise prescriptions were provided and activity was tracked via accelerometer and surveys between the supervised exercise sessions. Exclusion criteria included ECOG scores outside of the required 0-2 range. The single participant in this study was cleared by their oncologist for participation. **RESULTS:** A substantial improvement in physical well-being from 4.85 to 0.57 following the intervention was revealed. Consistent with these results, pain interference and pain intensity largely improved from 2 to 1 from pre to post intervention. Fatigue interfering with ADLs decreased from moderate to not at all at 9 days post-infusion and moderate to slightly at 5 days post-infusion. Psychological well-being items went up from 5.44 to 6.89 indicating that the patient's psychological well-being improved after intervention. The mean scores for distress and fear of recurrence also improved from 6.2 to 6 and 7.25 to 6, respectively, from pre to post intervention. There was however, a slight increase in social concerns from 6 to 6.63 indicating the participant had more concerns than at start of study. Lastly, spiritual well-being improved modestly from 4.57 to 5.14 at the end of the intervention. **CONCLUSION:** It was found that this intervention had a positive impact on overall QoL, specifically with respect to physical well-being, fatigue, and pain interference and perception. Moreover, the infusion-based timing of this exercise intervention may have contributed to further gains in psychological well-being including a reduction in distress and fear of recurrence.

Supported by West Chester University Student Faculty Research Award